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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,702	11/17/2003	Sergey S. Sarkisov	H8631	5393
23456	7590	01/10/2005	EXAMINER	
WADDEY & PATTERSON 414 UNION STREET, SUITE 2020 BANK OF AMERICA PLAZA NASHVILLE, TN 37219			BEN, LOHA	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/714,702

Applicant(s)

SARKISOV ET AL.

Examiner

LOHA BEN

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.


- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-39, 50-53, 55-61 and 68-83 is/are allowed.
- 6) ☒ Claim(s) 40-49, 54 and 62-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

  
**Loha Ben**  
**Primary Examiner**

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0104.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Minor informalities noted**

#### **In the Specification**

Page 30: line 14, "83" should be – 82 --.

#### **In the Claims**

In claim 40: line 10, "body" should be replaced with – plate --, otherwise "said bimorphic photomechanical body" has no antecedent basis.

In claim 60: line 6, "assembly" should be – body – ( please note line 5 of the claim ); and line 8, before "light"(second occurrence), -- pulsed – should be inserted to provide antecedent basis for line 2 of claim 61.

In claim 62: line 1, "a" should be replaced with – said --.

In claim 73: line 2, "said"(second occurrence) should be replaced with – a --, otherwise "said light generation device" has no antecedent basis.

In claim 75: line 1, after "73", -- , --(comma) should be inserted.

In claim 78: line 7 from the bottom, "switch" should be deleted, otherwise "said switch reflector" has no antecedent basis.

In claim 81: line 3 from the bottom, "said"(second occurrence) should be replaced with – an --, otherwise "said applied field" has no antecedent basis.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 40-49, 54 and 62-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 40: lines 10 and 11, 13, and 14, "said actuator output element" has no antecedent basis; and line 14, "the actuator receiving element" has no antecedent basis.

In claim 41: lines 3 and 4, "said light generation device" has no antecedent basis; and line 4, "said illumination surface" has no antecedent basis.

In claims 42 and 54: line 2, "said light transfer device" has no antecedent basis; and line 4, after "surfaces", no presence of a period is seen. Is there any more limitations to be added?

In claim 62: the remaining portion of the claim is missing. Please compare it with claim 43.

In claim 63: line 2, "the pulse repetition pattern" has no antecedent basis.

The remaining claims, depending from respective rejected base claims, inherit the indefiniteness thereof.

#### **Allowable Subject Matter**

Claims 1-39, 50-53, 55-61 and 68-83 are allowed.

Claim 40 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

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Claims 41-49, 54 and 62-67 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

All claims contain allowable subject matter. The allowability of the claims presented centers on the **non-isotropic characteristic of the bimorphic polymeric photomechanical body** or the **bimorphic deformation of the polymeric photomechanical body**.

#### **Communication**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loha Ben whose telephone number is (571) 272-2323. The examiner can normally be reached on Monday to Saturday, generally between 12:00 noon and 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps, can be reached on Monday to Friday, at (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: \*\*\*

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 7, 2005

A handwritten signature in black ink, appearing to read 'Loha Ben', with a long horizontal stroke extending to the right.

**Loha Ben**  
**Primary Examiner**